

# WAITZIA CONICA (COMPOSITAE-INULEAE), A NEW SPECIES FROM WESTERN AUSTRALIA

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The species is apparently most closely related to *Waitzia podolepis* (Gaud.) Steetz, but differs from the latter in its large conical receptacle and obliquely-beaked achenes, and yellow (upper) involucral bracts (those of *W. podolepis* being white). According to Ray Smith (personal communication) there is a fragmentary collection of *Waitzia conica* from the Gascoyne River area made by Pollack in 1882 (MEL). I have seen a sheet of what might yet be another related, but undescribed, species at Kew (Western Australia: "In fruticetis arenosis inter flumina Moore et Murchison," E. Pritzel 621. Sept., 1901). The latter specimen seems closest to *W. podolepis*, differing from that species in possessing an ununited pappus.

## WAITZIA **conica** Turner, sp. nov.

Erect delicate annuals 15-20 cm. high, leaves and branches moderately pubescent with short, often gland-tipped, scabrous hairs. Leaves alternate, sessile, lanceolate, 10-40 mm. long, 1-4 mm. wide, with peculiar capitate apices. Inflorescences 1-10 on peduncles up to 10 cm. long. Involucres hemispheric, 1 cm. long, 1-2 cm. across. Receptacle conical, 10-12 mm. high, 4-5 mm. across. Involucral bracts, 4- to 5-seriate, yellowish-green, scarious, ciliate, the outer bracts short, ovate, the innermost series up to 2 cm. long with bright yellow, terminal appendages, the latter 5-6 mm. long, 2 mm. wide, spreading at right angles to the involucre at anthesis, assuming the appearance of ray florets. Florets numerous, 8-10 mm. long. Corolla yellow, tubular, 5-lobed, glandular-pubescent. Style branches linear, truncate. Achenes brown, somewhat laterally compressed, minutely papillose, terminated by a slender, pale, oblique beak, 2-3 cm. long. Pappus of 16, finely plumose setae arising from the beak of the achene, united below for 1-5 mm. on the adaxial side.

Annuae erectae graciles 15-20 cm. altae; folia ramique sat dense scabro-pubescentes pilis brevibus saepe glanduloso-capitatis. Folia alterna sessilia lanceolata 10-40 mm. longa 1-4 mm. lata apice morate capitellata. Inflorescentiae 1-10 pedunculis usque 10 cm. longis. Involucrum hemi-

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Fig. 1-12, *Waitzia conica*. 1. Habit. natural size. —2. Inner involucral bract,  $\times 3$ .—3. Middle bract,  $\times 3$ .—4. Outer bract,  $\times 3$ .—5. Floret,  $\times 6$ .—6. Pappus,  $\times 6$ .—7. Staminal tube,  $\times 16$ , with single anther base showing tails,  $\times 40$ .—8. Style branches,  $\times 16$ .—9. Receptacle, natural size.—10. Achene (side view),  $\times 12$ .—11. Achene (front view),  $\times 12$ .—12. Stem fragment,  $\times 3$ .



sphericum 1 cm. longum 1-2 cm. latum. Receptaculum conicum 10-12 mm. altum 4-5 mm. latum. Phyllaria 4-5-seriata flavo-viridia scariosa ciliata, exteriora brevia ovata, interiora seriatim longiora angustiora, intima usque 2 cm. longa cum appendiculis apicalibus laete flavis 5-6 mm. longis 2 mm. latis sub anthesi angulo recto patentibus quasi floribus radiatis. Flosculi numerosi 8-10 mm. longi. Corolla flava tubulose 5-fida glanduloso-pubescentia. Styli rami lineares truncati. Achaenia brunnea lateraliter modicum compressa minute papillosa rostrata rostro tenui pallido obliquo 2-3 cm. longo. Pappi setae 16 tenuiter plumosae in rostro achaenii, basin versus 1-5 mm. latere adaxiali junctae. Chromosomata (meiotica visa)  $n = 12$ .

Chromosome number, as determined from meiotic material,  $n = 12$  pairs.

Holotype (K): Western Australia. 11 miles west of Gascoyne Junction. Foetid annual growing in rocky shale outcrops along road to Carnarvon. 24 Aug. 1965, B. L. Turner 5405. Isotypes (MEL, PER, TEX).

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